OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **GREAT POND, KINGSTON,** the program coordinators have made the following observations and recommendations:

Thank you for your continued hard work sampling the lake this season! Your monitoring group sampled **four** times this season and has done so for many years! As you know, multiple sampling events each season enable DES to more accurately detect water quality changes. Keep up the good work!

We encourage your monitoring group to formally participate in the DES Weed Watchers program, a volunteer program dedicated to monitoring lakes and ponds for the presence of exotic aquatic plants. This program only involves a small amount of time during the summer months. Volunteers survey their waterbody once a month from **June** through **September**. To survey, volunteers slowly boat, or even snorkel, around the perimeter of the waterbody and any islands it may contain. Using the materials provided in the Weed Watchers Kit, volunteers look for any species that are of suspicion. After a trip or two around the waterbody, volunteers will have a good knowledge of its plant community and will immediately notice even the most subtle changes. If a suspicious plant is found, the volunteers will send a specimen to DES for identification. If the plant specimen is an exotic, a biologist will visit the site to determine the extent of the problem and to formulate a management plant to control the nuisance infestation. Remember that early detection is the key to controlling the spread of exotic plants.

If you would like to help protect your lake or pond from exotic plant infestations, contact Amy Smagula, Exotic Species Program Coordinator, at 271-2248 or visit the Weed Watchers web page at www.des.state.nh.us/ wmb/exoticspecies/survey.htm.

FIGURE INTERPRETATION

- **Figure 1 and Table 1:** Figure 1 (Appendix A) shows the historical and current year chlorophyll-a concentration in the water column. Table 1 (Appendix B) lists the maximum, minimum, and mean concentration for each sampling season that the pond has been monitored through VLAP.

  Chlorophyll-a, a pigment found in plants, is an indicator of the algal abundance. Because algae are usually microscopic plants that contain chlorophyll-a, and are naturally found in lake ecosystems, the chlorophyll-a concentration measured in the water gives an estimation of the algal concentration or lake productivity. **The median summer chlorophyll-a concentration for New Hampshire's lakes and ponds is 4.58 mg/m^3.**

  NORTH STATION DEEP SPOT
  The current year data (the top graph) show that the chlorophyll-a concentration ***increased slightly*** from **June** to **July**, and then ***decreased steadily*** from **July** to **September**.

  The historical data (the bottom graph) show that the 2005 chlorophyll-a mean is ***slightly less than*** the state median and is ***approximately equal to*** the similar lake median (refer to Appendix F for more information about the similar lake median).

  Overall, visual inspection of the historical data trend line (the bottom graph) shows a ***slightly variable*** in-lake chlorophyll-a trend since monitoring began. Specifically, the mean concentration has ***fluctuated between approximately 3.3 and 5.1 mg/m^3*** since **1995.**

  SOUTH STATION DEEP SPOT
  The current year data (the top graph) show that the chlorophyll-a concentration ***fluctuated greatly*** from **June** to **September**.

  The historical data (the bottom graph) show that the 2005 chlorophyll-a mean is ***greater than*** the state median and the similar lake median (refer to Appendix F for more information about the similar lake median).

  Overall, visual inspection of the historical data trend line (the bottom graph) shows an ***increasing, meaning worsening,*** in-lake chlorophyll-a trend since monitoring began in **1991**.

In the 2006 annual report, since your group will have sampled the chlorophyll-a concentration at both deep spots for at least 10 consecutive years, we will conduct a statistical analysis of the historic data to determine if there has been a significant change in the annual mean since monitoring began.

While algae are naturally present in all ponds, an excessive or increasing amount of any type is not welcomed. In freshwater ponds, phosphorus is the nutrient that algae depend upon for growth. Algal concentrations may increase as nonpoint sources of phosphorus from the watershed increase, or as in-lake phosphorus sources increase (such as sediment phosphorus releases, known as internal loading). Therefore, it is extremely important for volunteer monitors to continually educate all watershed residents about activities within the watershed that affect phosphorus loading and pond quality.

- **Figure 2 and Table 3:** Figure 2 (Appendix A) shows the historical and current year data for pond transparency. Table 3 (Appendix B) lists the maximum, minimum and mean transparency data for each sampling season that the pond has been monitored through VLAP.

Volunteer monitors use the Secchi-disk, a 20 cm disk with alternating black and white quadrants, to measure water clarity (how far a person can see into the water). Transparency, a measure of water clarity, can be affected by the amount of algae and sediment from erosion, as well as the natural colors of the water. **The median summer transparency for New Hampshire's lakes and ponds is 3.2 meters.**

NORTH AND SOUTH DEEP SPOT STATIONS

The current year data (the top graph) show that the in-lake transparency ***increased gradually*** as the summer progressed. (Please note that the North Station deep spot was not sampled for transparency on the June sampling event.)

The historical data (the bottom graph) show that the 2005 mean transparency for both deep spots is ***slightly less than*** the state median and is ***much less than*** the similar lake median (refer to Appendix F for more information about the similar lake median).

Overall, visual inspection of the historical data trend line (the bottom graph) for both deep spots shows a ***decreasing, meaning worsening,*** transparency trend since monitoring began.

As previously discussed, since your group will have sampled the transparency at both deep spots for at least 10 consecutive years, the 2006 annual report will include a statistical analysis of the historic data to determine if there has been a significant change in the annual mean since monitoring began.

Typically, high intensity rainfall causes sediment erosion to flow into lakes and streams, thus increasing turbidity and decreasing clarity. Efforts should continually be made to stabilize stream banks, pond shorelines, disturbed soils within the watershed, and especially dirt roads located immediately adjacent to the edge of tributaries and the lake. Guides to Best Management Practices designed to reduce, and possibly even eliminate, nonpoint source pollutants, such as sediment loading, are available from DES upon request.

- **Figure 3 and Table 8:** The graphs in Figure 3 (Appendix A) show the amount of epilimnetic (upper layer) phosphorus and hypolimnetic (lower layer) phosphorus; the inset graphs show current year data. Table 8 (Appendix B) lists the annual maximum, minimum, and median concentration for each deep spot layer and each tributary since the pond has joined VLAP.

Phosphorus is the limiting nutrient for plant and algae growth in New Hampshire's freshwater lakes and ponds. Excessive phosphorus in a pond can lead to increased plant and algal growth over time. **The median summer total phosphorus concentration in the epilimnion (upper layer) of New Hampshire's lakes and ponds is 12 ug/L. The median summer phosphorus concentration in the hypolimnion (lower layer) is 14 ug/L.**

NORTH DEEP SPOT STATION

The current year data for the epilimnion (the top inset graph) show that the phosphorus concentration ***decreased*** from **June** to **July**, and then ***increased gradually*** from **July** to **September**.

The historical data show that the 2005 mean epilimnetic phosphorus concentration is ***slightly greater than*** the state median and is ***greater than*** the similar lake median.

Overall, visual inspection of the historical data trend line for the epilimnion shows a ***slightly increasing, meaning slightly worsening,*** phosphorus trend since monitoring began in **1995**.

The current year data for the hypolimnion (the bottom inset graph) show that the phosphorus concentration ***increased steadily*** from **June** to **September**.

The turbidity of the hypolimnion (lower layer) sample was ***elevated*** on each sampling event this season. The hypolimnetic turbidity has been at ***least slightly elevated*** on most sampling events since monitoring began. This suggests that the pond bottom is covered by a thick organic layer of sediment which is easily disturbed. When the pond bottom is disturbed, sediment, which typically contains attached phosphorus, is released into the water column. When collecting the hypolimnion sample, make sure that there is no sediment in the Kemmerer Bottle before filling the sample bottles.

The historical data show that the 2005 mean hypolimnetic phosphorus concentration is ***much greater than*** state median and the similar lake median. It is important to point out that the 2005 mean hypolimnetic concentration is the ***highest*** concentration that has been measured since monitoring began. In addition, the hypolimnetic phosphorus concentration at the **North Station** deep spot is ***much greater than*** the hypolimnetic phosphorus concentration at the **South Station** deep spot.

Overall, visual inspection of the historical data trend line for the hypolimnion shows an ***increasing, meaning worsening,*** phosphorus trend since monitoring began.

<u>SOUTH DEEP SPOT STATION</u>

The current year data for the epilimnion (the top inset graph) show that the phosphorus concentration ***increased slightly*** from **June** to **July**, ***decreased*** from **July** to **August**, and ***increased slightly*** from **August** to **September**.

The historical data show that the 2005 mean epilimnetic phosphorus concentration is ***slightly greater than*** the state median and is ***greater than*** the similar lake median.

The current year data for the hypolimnion (the bottom inset graph) show that the phosphorus concentration ***remained relatively stable*** from **June** to **September**.

As observed at the **North Station** deep spot, the turbidity of the **South Station** hypolimnion (lower layer) sample was ***elevated*** on each sampling event this season. The hypolimnetic turbidity has been at ***least slightly elevated*** on most sampling events since monitoring began. This suggests that the pond bottom is covered by a thick organic layer of sediment which is easily disturbed.

The historical data show that the 2005 mean hypolimnetic phosphorus concentration is ***greater than*** the state median and the similar lake median (refer to Appendix F for more information about the similar lake median).

Overall, visual inspection of the historical data trend line for the epilimnion and hypolimnion shows a ***variable*** phosphorus trend. Specifically, the mean annual epilimnetic phosphorus concentration has ***fluctuated between approximately 7 and 22 ug/L*** and the mean annual hypolimnetic phosphorus concentration has ***fluctuated between approximately 15 and 32 ug/L*** since monitoring began in **1991**.

As previously discussed, since your group will have sampled the phosphorus concentration at both deep spots for at least 10 consecutive years, the 2006 annual report will include a statistical analysis of the historic data to determine if there has been a significant change in the annual mean since monitoring began.

One of the most important approaches to reducing phosphorus loading to a waterbody is to continually educate watershed residents about its sources and how excessive amounts can adversely impact the ecology and the recreational, economical, and ecological value of lakes and ponds. Phosphorus sources within a pond's watershed typically include septic systems, animal waste, lawn fertilizer, road and construction erosion, and natural wetlands.

TABLE INTERPRETATION

- **Table 2: Phytoplankton**

Table 2 (Appendix B) lists the current and historical phytoplankton species observed in the pond. Specifically, this table lists the most dominant phytoplankton species observed in the sample and their relative abundance in the sample.

NORTH STATION DEEP SPOT

The dominant phytoplankton species observed in the **July** sample were ***Ceratium* (dinoflagellate), *Asterionella* (diatom),** and ***Fragilaria* (diatom).**

SOUTH STATION DEEP SPOT

The dominant phytoplankton species observed in the **July** sample were ***Asterionella* (diatom), *Fragilaria* (diatom), *Tabellaria* (diatom)** and ***Ceratium* (dinoflagellate).**

Phytoplankton populations undergo a natural succession during the growing season (Please refer to the "Biological Monitoring Parameters" section of this report for a more detailed explanation regarding seasonal plankton succession). Diatoms and golden-brown algae are typical in New Hampshire's less productive lakes and ponds.

- **Table 2: Cyanobacteria**
  A **small amount** of the cyanobacterium ***Anabaena*** and ***Oscillatoria*** were observed in the **July** plankton sample at both deep spots. ***These species, if present in large amounts, can be toxic to livestock, wildlife, pets, and humans.*** (Please refer to the "Biological Monitoring Parameters" section of this report for a more detailed explanation regarding cyanobacteria).

  Cyanobacteria can reach nuisance levels when phosphorus loading from the watershed to surface waters is increased (this is often caused by rain events) and favorable environmental conditions occur (such as a period of sunny, warm weather).

  The presence of cyanobacteria serves as a reminder of the pond's delicate balance. Watershed residents should continue to act proactively to reduce nutrient loading to the pond by eliminating fertilizer use on lawns, keeping the pond shoreline natural, re-vegetating cleared areas within the watershed, and properly maintaining septic systems and roads.

  In addition, residents should also observe the pond in September and October during the time of fall turnover (lake mixing) to document any algal blooms that may occur. Cyanobacteria have the ability to regulate their depth in the water column by producing or releasing gas from vesicles. However, occasionally lake mixing can affect their buoyancy and cause them to rise to the surface and bloom. Wind and currents tend to "pile" cyanobacteria into scums that accumulate in one section of the pond. If a fall bloom occurs, please collect a sample (any clean jar or bottle will be suitable) and contact the VLAP Coordinator.

- **Table 4: pH**
  Table 4 (Appendix B) presents the in-lake and tributary current year and historical pH data.

  pH is measured on a logarithmic scale of 0 (acidic) to 14 (basic). pH is important to the survival and reproduction of fish and other aquatic life. A pH below 6.0 limits the growth and reproduction of fish. A pH between 6.0 and 7.0 is ideal for fish. The median pH value for the epilimnion (upper layer) in New Hampshire's lakes and ponds is **6.6**, which indicates that the surface waters in the state are slightly acidic. For a more detailed explanation regarding pH, please refer to the "Chemical Monitoring Parameters" section of this report.

  The mean pH at the deep spot this season ranged from **6.33** in the hypolimnion to **6.81** in the epilimnion at the **North Station** deep spot, and ranged from **6.22** in the hypolimnion to **6.81** in the epilimnion at the **South Station** deep, which means that the water is ***slightly acidic.***

It is important to point out that the pH in the hypolimnion (lower layer) was ***lower (more acidic)*** than in the epilimnion (upper layer). This increase in acidity near the pond bottom is likely due the decomposition of organic matter and the release of acidic by-products into the water column.

Due to the presence of granite bedrock in the state and acid deposition (from snowmelt, rainfall, and atmospheric particulates) in New Hampshire, there is not much that can be done to effectively increase pond pH.

- **Table 5: Acid Neutralizing Capacity**
  Table 5 (Appendix B) presents the current year and historical epilimnetic ANC for each year the pond has been monitored through VLAP.

  Buffering capacity (ANC) describes the ability of a solution to resist changes in pH by neutralizing the acidic input. The median ANC value for New Hampshire's lakes and ponds is **4.9 mg/L**, which indicates that many lakes and ponds in the state are at least "moderately vulnerable" to acidic inputs. For a more detailed explanation, please refer to the "Chemical Monitoring Parameters" section of this report.

  The mean Acid Neutralizing Capacity (ANC) of the epilimnion (the upper layer) at the **North Station** deep spot was **10.3 mg/L** and at the **South Station** deep spot was **10.0 mg/L** this season. Both annual means are ***greater than*** the state median and indicate that the pond ***has a low vulnerability*** to acidic inputs (such as acid precipitation).

- **Table 6: Conductivity**
  Table 6 (Appendix B) presents the current and historical conductivity values for tributaries and in-lake data. Conductivity is the numerical expression of the ability of water to carry an electric current (which is determined by the number of negatively charged ions from metals, salts, and minerals in the water column). The median conductivity value for New Hampshire's lakes and ponds is **40.0 uMhos/cm**. For a more detailed explanation, please refer to the "Chemical Monitoring Parameters" section of this report.

The mean annual conductivity in the epilimnion at the **North Station** deep spot this season was **189.78 uMhos/cm** and at the **South Station** deep spot was **191.63 uMhos/cm**. Both annual means are ***much greater than*** the state median.

Overall, the conductivity has ***increased*** in the pond and **most inlet tributaries (Great Pond Park Road, Kelly Brook Inlet, and Thayer Road Inlet)** and the **outlet** since monitoring began. Typically, sources of increased conductivity are due to human activity. These activities include failed or marginally functioning septic systems, agricultural runoff, and road runoff (which contains road salt during the spring snow melt). New development in the watershed can alter runoff patterns and expose new soil and bedrock areas, which could contribute to increasing conductivity. In addition, natural sources, such as iron and manganese deposits in bedrock, can influence conductivity.

We recommend that your monitoring group conduct a shoreline conductivity survey of the lake and the tributaries to help pinpoint the sources of ***elevated*** conductivity.

To learn how to conduct a shoreline or tributary conductivity survey, please refer to the 2004 "Special Topic Article" or contact the VLAP Coordinator.

- **Table 8: Total Phosphorus**

Table 8 (Appendix B) presents the current year and historical total phosphorus data for in-lake and tributary stations. Phosphorus is the nutrient that limits the algae's ability to grow and reproduce. Please refer to the "Chemical Monitoring Parameters" section of this report for a more detailed explanation.

The total phosphorus concentration was ***elevated*** in **each** of the inlet tributary samples on **each** sampling event this season. The turbidity of **most** of the inlet tributary samples was also ***elevated*** on **each** sampling event this season, which suggests that erosion is occurring throughout the watershed.

The phosphorus concentration in **each** of the **outlet** samples was ***not elevated*** this season which suggests that the phosphorus that is flowing into the pond from the watershed is accumulating in the lake and is assimilated by the phytoplankton. This could explain the ***increasing (worsening)*** phosphorus trends observed at the **North Station** deep spot.

If you suspect that erosion is occurring in the watershed, we recommend that your monitoring group conduct stream survey and storm event sampling. This additional sampling may allow us to determine what is causing the ***elevated*** levels of turbidity and phosphorus.

For a detailed explanation on how to conduct rain event sampling and stream surveys, please refer to the 2002 VLAP Annual Report "Special Topic Article" or contact the VLAP Coordinator.

- **Table 9 and Table 10: Dissolved Oxygen and Temperature Data**
  Table 9 (Appendix B) shows the dissolved oxygen/temperature profile(s) for the 2005 sampling season. Table 10 (Appendix B) shows the historical and current year dissolved oxygen concentration in the hypolimnion (lower layer). The presence of dissolved oxygen is vital to fish and amphibians in the water column and also to bottom-dwelling organisms. Please refer to the "Chemical Monitoring Parameters" section of this report for a more detailed explanation.

  The dissolved oxygen concentration was ***much lower in the hypolimnion (lower layer) than in the epilimnion (upper layer)*** at both deep spot stations on the **July** sampling event. As stratified ponds age, and as the summer progresses, oxygen typically becomes ***depleted*** in the hypolimnion by the process of decomposition. Specifically, the loss of oxygen in the hypolimnion results primarily from the process of biological breakdown of organic matter (i.e.; biological organisms use oxygen to break down organic matter), both in the water column and particularly at the bottom of the pond where the water meets the sediment.

  During this season, and many past sampling seasons, the pond has had a lower dissolved oxygen concentration and a higher total phosphorus concentration in the hypolimnion (lower layer) than in the epilimnion (upper layer). These data suggest that the process of ***internal phosphorus loading*** is occurring in the pond. When oxygen levels are depleted to less than 1 mg/L in the hypolimnion **(as it was this season and in many past seasons)**, the phosphorus that is normally bound up with metals in the sediment may be re-released into the water column. Since an internal source of phosphorus in the pond may be present, it is even more important that watershed residents act proactively to minimize phosphorus loading from the watershed.

- **Table 11: Turbidity**
  Table 11 (Appendix B) lists the current year and historical data for in-lake and tributary turbidity. Turbidity in the water is caused by suspended matter, such as clay, silt, and algae. Water clarity is strongly influenced by turbidity. Please refer to the "Other Monitoring Parameters" section of this report for a more detailed explanation.

  As discussed previously, the hypolimnetic turbidity has been at ***least slightly elevated at both deep spots*** on most sampling events since monitoring began. This suggests that the pond bottom is covered by a thick organic layer of sediment which is easily disturbed.

  Also discussed previously, the turbidity was ***elevated*** in **most** of the inlet tributaries on **each** sampling event this summer which suggests that erosion is occurring throughout the watershed.

- **Table 12: Bacteria (*E.coli*)**
  Table 12 lists the current year and historical data for bacteria (*E.coli*) testing. (Please note that Table 12 now lists the maximum and minimum results for this season and for all past sampling seasons.) *E. coli* is a normal bacterium found in the large intestine of humans and other warm-blooded animals. *E.coli* is used as an indicator organism because it is easily cultured and its presence in the water, in defined amounts, indicates that sewage **MAY** be present. If sewage is present in the water, potentially harmful disease-causing organisms **MAY** also be present.

  The *E. coli* concentration at **Pine Acres Beach** on the **July** sampling event was **less than two** counts per 100 mL ***which is much less than*** the state standard of 88 counts per 100 mL for designated public beaches.

  If you are concerned about bacteria levels at this beach, you may want to repeat this test next season on a weekend during heavy beach use or after a rain event. Since *E.coli* die quickly in cool pond waters, testing is most accurate and most representative of the health risk to bathers when the source (humans, animals, or waterfowl) is present.

- **Table 13: Chloride**
  The chloride ion (Cl^-) is found naturally in some surfacewaters and groundwaters and in high concentrations in seawater. Research has shown that ***elevated*** chloride levels can be toxic to freshwater aquatic life. In order to protect freshwater aquatic life in New Hampshire, the state has adopted **acute and chronic** chloride criteria of **860 and 230 mg/L** respectively. The chloride content in New Hampshire lakes

is naturally low, generally less than 2 mg/L in surface waters located in remote areas away from habitation. Higher values are generally associated with salted highways and, to a lesser extent, with septic inputs. Please refer to the “Chemical Monitoring Parameters” section of this report for a more detailed explanation.

Chloride sampling was not conducted in 2005.

A limited amount of chloride sampling was conducted at the **South Station** deep spot in **2004**. The results ranged from **41 to 44 mg/L**, which is ***less than*** the state acute and chronic chloride criteria. However, these concentrations are ***much greater than*** what we would normally expect to measure in undisturbed New Hampshire surface waters.

It is likely that de-icing materials applied to nearby roadways during the winter months may be influencing the conductivity the pond. In New Hampshire, the most commonly used de-icing material is salt (sodium chloride).

We recommend that your monitoring group conduct chloride sampling in the epilimnion at both deep spots and in the inlet tributaries near salted-roadways, particularly in the spring, soon after snow-melt and after rain events during the summer. This will establish a baseline of data that will assist your monitoring group and DES to determine lake quality trends in the future.

Please note that there will be an additional cost for each of the chloride samples and that these samples must be analyzed at the DES laboratory in Concord. In addition, it is best to conduct chloride sampling in the spring as the snow is melting and during rain events.

- **Table 14: Current Year Biological and Chemical Raw Data**
  This table lists the most current sampling season results. Since the maximum, minimum, and annual mean values for each parameter are not shown on this table, this table displays the current year “raw” (meaning unprocessed) data. The results are sorted by station, depth zone (epilimnion, metalimnion, and hypolimnion) and parameter.

- **Table 15: Station Table**
  As of the Spring of 2004, all historical and current year VLAP data are included in the DES Environmental Monitoring Database (EMD). To facilitate the transfer of VLAP data into the EMD, a new station identification system had to be developed. While volunteer monitoring groups can still use the sampling station names that they

have used in the past (and are most familiar with), an EMD station name also exists for each VLAP sampling location. For each station sampled at your pond, Table 15 identifies what EMD station name corresponds to the station names you have used in the past and will continue to use in the future.

DATA QUALITY ASSURANCE AND CONTROL

Annual Assessment Audit:

During the annual visit to your pond, the biologist conducted a “Sampling Procedures Assessment Audit” for your monitoring group. Specifically, the biologist observed the performance of your monitoring group while sampling and filled out an assessment audit sheet to document the ability of the volunteer monitors to follow the proper field sampling procedures (as outlined in the VLAP Monitor’s Field Manual). This assessment is used to identify any aspects of sample collection in which volunteer monitors fail to follow proper procedures, and also provides an opportunity for the biologist to retrain the volunteer monitors as necessary. This will ultimately ensure that the samples that the volunteer monitors collect are truly representative of actual lake and tributary conditions.

Overall, your monitoring group did an ***excellent*** job collecting samples on the annual biologist visit this season! Specifically, the members of your monitoring group followed the proper field sampling procedures and there was no need for the biologist to provide additional training. Keep up the good work!

Sample Receipt Checklist:

Each time your monitoring group dropped off samples at the laboratory this summer, the laboratory staff completed a sample receipt checklist to assess and document if the volunteer monitors followed proper sampling techniques when collecting the samples. The purpose of the sample receipt checklist is to minimize, and hopefully eliminate, future re-occurrences of improper sampling techniques.

Overall, the sample receipt checklist showed that your monitoring group did an ***excellent*** job when collecting samples and submitting them to the laboratory this season! Specifically, the members of your monitoring group followed the proper field sampling procedures and there was no need for the laboratory staff to contact your group with questions, and no samples were rejected for analysis.

USEFUL RESOURCES

Best Management Practices to Control Nonpoint Source Pollution: A Guide for Citizens and Town Officials, NHDES Booklet WD-03-42, (603) 271-2975.

Canada Geese Facts and Management Options, NHDES Fact Sheet BB-53, (603) 271-2975 or www.des.state.nh.us/factsheets/bb/bb-53.htm.

Cyanobacteria in New Hampshire Waters Potential Dangers of Blue-Green Algae Blooms, NHDES Fact Sheet WMB-10, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-10.htm.

Erosion Control for Construction in the Protected Shoreland Buffer Zone, NHDES Fact Sheet WD-SP-1, (603) 271-2975 or www.des.state.nh.us/factsheets/sp/sp-1.htm.

Impacts of Development Upon Stormwater Runoff, NHDES Fact Sheet WD-WQE-7, (603) 271-2975 or www.des.state.nh.us/factsheets/wqe/wqe-7.htm.

Lake Protection Tips: Some Do's and Don'ts for Maintaining Healthy Lakes, NHDES Fact Sheet WD-BB-9, (603) 271-2975 or www.des.state.nh.us/factsheets/bb/bb-9.htm.

Low Impact Development: Taking Steps to Protect New Hampshire's Surface Waters NHDES Fact Sheet WD-WMB-16, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-17.htm.

Proper Lawn Care In the Protected Shoreland, The Comprehensive Shoreland Protection Act, NHDES Fact Sheet WD-SP-2, (603) 271-2975 or www.des.state.nh.us/factsheets/sp/sp-2.htm.

Road Salt and Water Quality, NHDES Fact Sheet WD-WMB-4, (603) 271-2975 or www.des.state.nh.us/factsheets/wmb/wmb-4.htm.

Sand Dumping - Beach Construction, NHDES Fact Sheet WD-BB-15, (603) 271-2975 or www.des.state.nh.us/factsheets/bb/bb-15.htm.

Soil Erosion and Sediment Control on Construction Sites, NHDES Fact Sheet WQE-6, (603) 271-2975 or www.des.state.nh.us/factsheets/wqe/wqe-6.htm.